Natural Gas Annual 2000

November 2001

Energy Information Administration
Office of Oil and Gas
U.S. Department of Energy
Washington, DC 20585

Contacts

The *Natural Gas Annual* is prepared by the Energy Information Administration, Office of Oil and Gas, Natural Gas Division, under the direction of Elizabeth Campbell.

General questions and comments concerning the contents of the *Natural Gas Annual* may be obtained from the National Energy Information Center, (202) 586-8800. Questions about specific areas should be referred to Margaret Natof (202/586-6303). Technical inquiries should be referred to the following specialist:

SupplySharon.Belcher@ei		(202) 586-6119
TransmissionDolly.Tolson@eia.c	•	(202) 586-6664
ConsumptionSylvia.Norris@eia.	•	(202) 586-6106
Electronic versions Sheila.Darnell@eia		(202) 586-6165

Preface

The *Natural Gas Annual* provides information on the supply and disposition of natural gas to a wide audience including Congress, Federal and State agencies, industry analysts, consumers, and educational institutions. The 2000 data are presented in a sequence that follows natural gas (including supplemental supplies) from its production to its end use. This is followed by tables summarizing natural gas supply and disposition from 1996 to 2000 for each Census Division and each State. Annual historical data are shown at the national level.

The data in the *Natural Gas Annual 2000* are taken from surveys conducted by the Energy Information Administration (EIA), U.S. Department of Energy (DOE), to fulfill its responsibilities for gathering and reporting energy data. Two EIA surveys provide most of the information presented in this report—the mandatory Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and the Form EIA-895, "Monthly Quantity and Value of Natural Gas Report." Form EIA-176 was submitted by respondents out of an identified universe of operators of fields, wells, or natural gas processing plants who distribute gas to end users or transport gas to or across a State border; operators of synthetic

natural gas plants; natural gas distributors; natural gas pipeline companies; and companies that operate underground natural gas storage facilities. Form EIA-895 was submitted by the appropriate agencies of the 33 natural gas producing States.

Data collected on Form EIA-176 are not proprietary. Selected company-level data are presented in the Consumption section.

Other EIA surveys that provided information for this report are Forms EIA-816, "Monthly Natural Gas Liquids Report," and EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production," for gas processed, plant fuel, and extraction loss data; Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," for data on the city gate prices; Forms EIA-759, "Monthly Power Plant Report," and FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," for data on the quantity and price of natural gas consumed by electric utilities; and Office of Fossil Energy, *Natural Gas Imports and Exports*, for data on the quantity and price of natural gas imports and exports.

Cautionary Note: Number of Residential Consumers

The Energy Information Administration (EIA) expects that there may be some double counting in the number of residential users reported for 1999 and 2000.

EIA collects information on the number of residential consumers through a survey of companies that deliver gas to consumers (Form EIA-176). The survey asks companies for the number of residential customers served as sales customers as well as customers to whom they deliver gas purchased from others. Traditionally, residential customers obtained the gas and all services associated with delivering it from their local distribution company (LDC). The LDC records these customers as sales customers. Customer choice programs allow consumers to select the provider from whom they purchase gas. When customers elect to purchase gas from a provider other than the LDC, the LDC continues to deliver the gas to the household even though it no longer sells the gas. When customers switch to another provider, they become transportation service customers for the LDC. A residential customer who enters a customer choice program may be classified both as a traditional sales customer and, after entering the program, as a transportation service customer. This double reporting affects the number of residential consumers shown in the *Natural Gas Annual*.

Table 20 assists readers in evaluating the extent and possible effect of double reporting. It lists the number of residential sales and transportation service customers reported on Form EIA-176 for 1999 and 2000. Appendix A includes the survey Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Numbers of residential customers are reported on this form for both sales (in Part V, line 5.4.1) and transportation (in Part V, line 7.4.1).

Customer choice programs, also known as retail unbundling programs, were implemented during 1998, 1999, and 2000. A description of these programs for States offering customer choice is on the EIA web site at: www.eia.doe.gov/oil_gas/natural_gas/restructure/restructure.html.

Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE that has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The United States Geological Survey (USGS) and the United States Minerals Management

Service (MMS) of the Department of the Interior were sources of supplemental information on production, the number of producing gas and gas-condensate wells, and wellhead values. The geographic coverage is the 50 States and the District of Columbia.

Natural Gas Publications and Databases Available Electronically

All of the natural gas publications are available electronically on the EIA website. Certain natural gas data are also provided in database formats on the web site. The table below is a guide to the major natural gas products.

Product

Publications		
Natural Gas Weekly Update	PDF	Analysis of current price, supply, and storage data
Natural Gas Monthly	PDF	Monthly supply, disposition, and price data
Natural Gas Annual	PDF	Annual supply, disposition, and price data
Historical Natural Gas Annual	PDF	Historical annual supply, disposition, and price data from 1930 - 2000
Issues and Trends	PDF	Comprehensive analysis of growth and change in the natural gas industry
U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves	PDF	Proved reserves in the United States
Oil and Gas Field Code Master List	PDF	Listing of U.S. oil and gas field names
<u>Databases</u>		
Monthly data	TXT	Tables 1-6, and 9 from the Natural Gas Monthly
Historical monthly data	EXE	Consumption and price data, 1984-1994; 1995-present
Annual data	TXT	Tables from the Natural Gas Annual
Historical annual data	TXT	Tables from the Historical Natural Gas Annual
Field Codes	EXE	Oil & Gas Field Code Master List
A 1. 4.		

Applications

EIA-176 Query System EXE Company filings to the Form EIA-176, "Annual Report of Natural

and Supplemental Gas Supply and Disposition"

EIAGIS EXE Periodic updates for users of the EIAGIS-NG Geographic Information

System

Format Contents

PDF files are image files that can be viewed through Adobe Acrobat.

TXT files are ASCII text. They may be replications of published tables, including table titles, column and row identification, or they may be flat files with a minimum of content description suitable for input to spreadsheets or other programs.

EXE files are executables that can be downloaded then opened. Databases are distributed as self-executing Zipped archives which spawn numerous data files and documentation. Applications are distributed as self-executing Zipped archives which initially generate numerous files and then form an application which is installed on the user's PC.

Contents

	Page
Overview	
Supplies	
mports & Exports	
Movements and Storage	
Consumption	
Consumer Prices	47
Census Division Summaries	
State Summaries	
Historical Data	185
Appendices	
A. Summary of Data Collection Operations and Report Methodology	196
B. Metric and Thermal Conversion Tables	214
Glossary	

Tables

		Page
		_
1.	Summary Statistics for Natural Gas in the United States, 1996-2000	
2.	Natural Gas Production, Transmission, and Consumption by State, 2000	
3.	Gross Withdrawals and Marketed Production of Natural Gas by State, 1996-2000	
4.	Offshore Gross Withdrawals of Natural Gas by State, 1996-2000	. 12
5.	Number of Producing Gas and Gas Condensate Wells by State as of December 31, 1996-2000	. 13
6.	Wellhead Value and Marketed Production of Natural Gas by State, 1996-2000	
7.	Natural Gas Processed, Liquids Extracted, and Estimated Extraction Loss by State, 2000	
8.	Supplemental Gas Supplies by State	. 10
9.	Summary of U.S. Natural Gas Imports and Exports, 1996-2000	
10.	Summary of U.S. Natural Gas Exports by Point of Entry, 1999-2000	. 21
	Interstate Movements and Movements Across U.S. Borders of Natural Gas by State, 2000	
12.	Additions to and Withdrawals from Gas Storage by State, 2000	. 23
13.	Underground Natural Gas Storage Capacity by State, December 31, 2000	. 32
	Consumption of Natural Gas by State, 1996-2000	
15.	Natural Gas Delivered to Consumers by State and Sector, 1996-2000	. 30
	Natural Gas Delivered to Commercial Consumers for the Account of Others by State, 1996-2000	
	Natural Gas Delivered to Industrial Consumers for the Account of Others by State, 1996-2000	
	Natural Gas Delivered to Electric Utilities for the Account of Others by State, 1996-2000	
	Number of Natural Gas Residential Consumers by Type of Service and State, 1999-2000	
	Number of Natural Gas Residential Consumers by Type of Service and State, 1999-2000	
	Number of Natural Gas Industrial Consumers by Type of Service and State, 1999-2000	
	Average City Gate Price of Natural Gas in the United States, 1996-2000	
24	Average Price of Natural Gas Delivered to Consumers by State, 2000	51
	Leading Suppliers of Natural Gas Sold to Residential Customers in the United States, 2000	
	Leading Suppliers of Natural Gas Sold to Commercial Consumers in the United States, 2000	
	Leading Suppliers of Natural Gas Sold and Transported in the United States, 2000	
	Natural Gas Delivered to Consumers by Census Division, 2000	
	Average Price of Natural Gas Delivered to Consumers by Census Division, 1999-2000	
	Summary Statistics for Natural Gas - New England, 1996-2000	
31.	Summary Statistics for Natural Gas - Middle Atlantic, 1996-2000	. 62
32.	Summary Statistics for Natural Gas - East North Central, 1996-2000	. 64
	Summary Statistics for Natural Gas - West North Central, 1996-2000	
	Summary Statistics for Natural Gas - South Atlantic, 1996-2000	
	Summary Statistics for Natural Gas - East South Central, 1996-2000	
	Summary Statistics for Natural Gas - West South Central, 1996-2000	
	Summary Statistics for Natural Gas - Mountain, 1996-2000	
	Summary Statistics for Natural Gas - Pacific Contiguous, 1996-2000	
	Summary Statistics for Natural Gas - Pacific Noncontiguous, 1996-2000	
	Percent Distribution of Natural Gas Supply and Disposition by State, 2000	
	Percent Distribution of Natural Gas Delivered to Consumers by State, 2000	
	Summary Statistics for Natural Gas - Alabama, 1996-2000	
	Summary Statistics for Natural Gas - Alaska, 1996-2000	
	Summary Statistics for Natural Gas - Arizona, 1996-2000	
	Summary Statistics for Natural Gas - Arkansas, 1996-2000	
	Summary Statistics for Natural Gas - California, 1996-2000	
	Summary Statistics for Natural Gas - Colorado, 1996-2000	
	Summary Statistics for Natural Gas - Connecticut, 1996-2000	
49.	Summary Statistics for Natural Gas - Delaware, 1996-2000	. 9/
	Summary Statistics for Natural Gas - Florida, 1996-2000	
	Summary Statistics for Natural Gas - Georgia, 1996-2000	
	Summary Statistics for Natural Gas - Idaho, 1996-2000	
	Summary Statistics for Natural Gas - Illinois, 1996-2000.	

56.	Summary Statistics for Natural Gas - Indiana, 1996-2000	111
	Summary Statistics for Natural Gas - Iowa, 1996-2000	
58.	Summary Statistics for Natural Gas - Kansas, 1996-2000	115
59.	Summary Statistics for Natural Gas - Kentucky, 1996-2000	117
60.	Summary Statistics for Natural Gas - Louisiana, 1996-2000	119
61.	Summary Statistics for Natural Gas - Maine, 1996-2000	121
62.	Summary Statistics for Natural Gas - Maryland, 1996-2000	123
63.	Summary Statistics for Natural Gas - Massachusetts, 1996-2000	125
64.	Summary Statistics for Natural Gas - Michigan, 1996-2000	127
65.	Summary Statistics for Natural Gas - Minnesota, 1996-2000	129
66.	Summary Statistics for Natural Gas - Mississippi, 1996-2000	131
	Summary Statistics for Natural Gas - Missouri, 1996-2000	
	Summary Statistics for Natural Gas - Montana, 1996-2000	
69.	Summary Statistics for Natural Gas - Nebraska, 1996-2000	137
70.	Summary Statistics for Natural Gas - Nevada, 1996-2000	139
71.	Summary Statistics for Natural Gas - New Hampshire, 1996-2000	141
72.	Summary Statistics for Natural Gas - New Jersey, 1996-2000	143
73.	Summary Statistics for Natural Gas - New Mexico, 1996-2000	145
74.	Summary Statistics for Natural Gas - New York, 1996-2000	147
75.	Summary Statistics for Natural Gas - North Carolina, 1996-2000	149
76.	Summary Statistics for Natural Gas - North Dakota, 1996-2000	151
	Summary Statistics for Natural Gas - Ohio, 1996-2000	
	Summary Statistics for Natural Gas - Oklahoma, 1996-2000	
	Summary Statistics for Natural Gas - Oregon, 1996-2000	
	Summary Statistics for Natural Gas - Pennsylvania, 1996-2000	
	Summary Statistics for Natural Gas - Rhode Island, 1996-2000	
	Summary Statistics for Natural Gas - South Carolina, 1996-2000	
	Summary Statistics for Natural Gas - South Dakota, 1996-2000	
	Summary Statistics for Natural Gas - Tennessee, 1996-2000	
	Summary Statistics for Natural Gas - Texas, 1996-2000	
	Summary Statistics for Natural Gas - Utah, 1996-2000	
	Summary Statistics for Natural Gas - Vermont, 1996-2000	
	Summary Statistics for Natural Gas - Virginia, 1996-2000	
	Summary Statistics for Natural Gas - Washington, 1996-2000	
90.	Summary Statistics for Natural Gas - West Virginia, 1996-2000	179
91.	Summary Statistics for Natural Gas - Wisconsin, 1996-2000	181
92.	Summary Statistics for Natural Gas - Wyoming, 1996-2000	183
93.	Quantity and Average Price of Natural Gas Production in the United States, 1930-2000	186
94.	Supply and Disposition of Natural Gas in the United States, 1930-2000	188
95.	Natural Gas Consumption in the United States, 1930-2000	192
96.	Selected National Average Natural Gas Prices, 1967-2000	195
A1.	Comparison of Electric Utility Natural Gas Consumption Data by State, 2000	212
A2.	Natural Gas Unaccounted for by State, 1996-2000	213
	Summary Statistics for Natural Gas in the United States, Metric Equivalents, 1996-2000	
B2.	Thermal Conversion Factors and Data, 1996-2000	218

Illustrations

1	Natural Cas Flow Diagram, 2000
1.	Natural Gas Flow Diagram, 2000
2.	Selected Average Prices of Natural Gas in the United States, 1996 - 2000
3.	Natural Gas Supply and Disposition in the United States, 2000
4.	Marketed Production of Natural Gas in the United States, 2000
5.	Marketed Production of Natural Gas in Selected States, 1996 - 2000
6.	Net Imports as a Percentage of Total Consumption of Natural Gas, 1972-2000
7.	Flow of Natural Gas Imports and Exports, 2000
8.	Principal Interstate Natural Gas Flow Summary, 2000
9.	Interstate Movements
	Locations of Existing Natural Gas Underground Storage Fields in the United States
	Natural Gas Delivered to Consumers in the United States, 1996 - 2000
	Natural Gas Delivered to Consumers in the United States, 2000
13.	Percent of Natural Gas Deliveries in the United States Representing Deliveries
	for the Account of Others, by Consumer Sector, 1996 - 2000
	Average Price of Natural Gas Delivered to Consumers in the United States, 1996 - 2000
	Average Price of Natural Gas Delivered to Residential Consumers, 1980 - 2000
	Average City Gate Price of Natural Gas in the United States, 2000
	Average Price of Natural Gas Delivered to U.S. Residential Consumers, 2000
	Average Price of Natural Gas Delivered to U.S. Onsystem Commercial Consumers, 2000
	Average Price of Natural Gas Delivered to U.S. Onsystem Industrial Consumers, 2000
	Average Price of Natural Gas Delivered to U.S. Electric Utilities, 2000
	Marketed Production of Natural Gas by Census Division, 2000
	Natural Gas Delivered to Consumers by Census Division, 2000
23.	Natural Gas Supply and Disposition in the United States, 1969-2000
24	Natural Gas Delivered to Consumers in the United States, 1930-2000
25.	Average Price of Natural Gas Delivered to U.S. Consumers, 1967-2000
	Form EIA-176
A2.	Form EIA-895

Page